SHARPENING THE EDGE ON COMMUNICATION

A cutting-edge robust broadband solution now connects all corners of the world.

Thrane & Thrane

FACE TO FACE WITHIN SECONDS

Broadband is an integral and pivotal part of most forms of communication today - across borders regardless of time and place. When stationed in far-away corners of the world, being able to communicate with your boss, co-workers, customers and family via the www, e-mail or video transmission is an all-important and extremely useful ability realized through either the ISDN or IP interfaces of the EXPLORER™ 700.

EXPLORER™ 700

Inmarsat – pioneering satellite communication

It all began in 1979. At first, the focus was maritime security in far away waters. Today Inmarsat is the leading satellite communication network of the world. Inmarsat provides satellite communication services to ship owners, business people, TV broadcasters, aid workers, governments, airlines and many others. BGAN is Inmarsat's newest, most advanced offering.

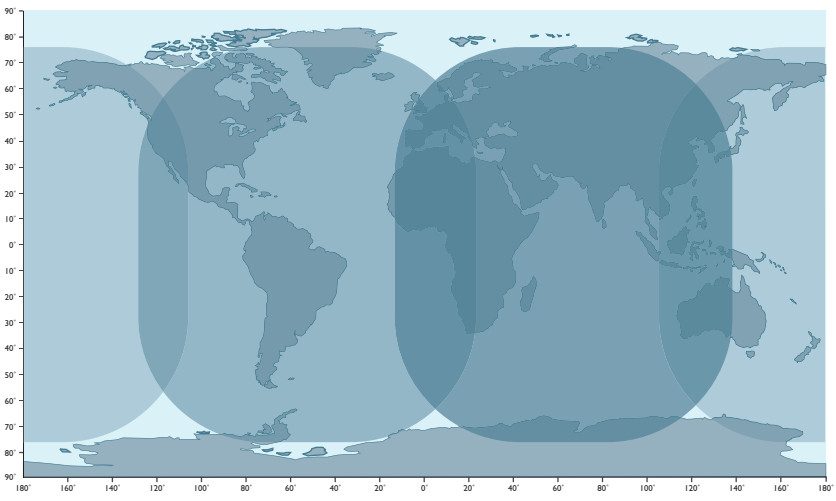
The end of sluggish connections

Satisfactory communication requires equipment that can carry data at a high rate, ensuring that you do not transmit fuzzy and pixellated images that make little sense to anyone. Also when sending important files (e.g. in cad format) from the field to your place of work, it is of high consequence if it takes too long or the file is damaged during transmission because connection is sluggish. And encryption such as VPN requires a certain bandwidth. Speed is key. Speed is the new EXPLORER™ 700.

On the forefront of ease

A great many people now take broadband connections for granted. Nevertheless, when travelling in remote corners of the world, you often experience that the local terrestrial networks are not up to standard - if available at all, thus making your work difficult. By bringing your own compact, high-speed solution, you ensure ease of work for yourself and also for your colleagues as EXPLORER™ 700 provides a multi-user environment.

BGAN coverage



The map depicts Inmarsat's expectations of coverage, but does not represent a guarantee of service. The availability of service at the edge of coverage areas fluctuates depending on various conditions. The launch of the F-3 satellite will be determined in due course.

World-class coverage with BGAN

With Thrane & Thrane's cutting edge BGAN terminals, you are guaranteed world-class satellite communication and work comfort. BGAN offers the fastest available data rates with a coverage greatly surpassing that of even the leading cellular networks. Additionally, BGAN airtime prices are often lower than those of standard cellular roaming. BGAN is more than the others for less.

A SPOT-ON WORLDLY SOLUTION

With the EXPLORER™ 500, Thrane & Thrane were on the forefront of providing broadband on the spot. With the new EXPLORER™ 700, we are even more spot-on giving you more independence when working in the field by ensuring easy and secure access to the rest of the world through a flexible mobile multi-user solution featuring a solar panel input and all standard IP interfaces such as USB, Ethernet, Bluetooth and WIFI. The EXPLORER™ 700 is more world more easily.

With the EXPLORER™ 700 you can:

- Talk on the phone
- Run a videoconference
- Download and send e-mails
- Surf the Internet at speeds up to 492 kbps
- Log on to your corporate Intranet
- Transfer large files
- Use standard encryption such as VPN
- Securely send and receive faxes
- Send text messages
- Operate it via a multi-user terminal and more

All this effectively and trouble free with a light broadband solution you can easily bring along everywhere you go.

As such, EXPLORER™ 700 enables a mobile office solution ideal for journalists, aid workers, civil engineers, consultants, first responders etc. Moreover the mobile video feature makes it an ideal choice for broadcasters, military and medical crew in far away places, where local communication is scarce. Overall, the EXPLORER™ 700's ability to interconnect and access worldly communication wherever whenever makes it well suited for remote surveillance etc. and as a communications backup for embassies, hospitals, airports, governments etc. The range is wide and the edge is clear.

e-mail – Often, the crucial part of an email is contained in a large attachment. With EXPLORER™ 700, reading the e-mail and fetching the attachments is swift and easy.

World Wide Web – With EXPLORER™ 700, you can surf the Internet as you would at home.

Phone – You can connect standard 2-wire handset via cable to the EXPLORER™ 700. The Wireless Bluetooth connection offers support for up to 7 devices, including head-, hand- and earsets.

Fax – Easily connect your fax via cable

Corporate LAN – With a Virtual Private Connection you gain access to your corporate network from places you have never even dreamed of. No slow connections here.

WLAN – The EXPLORER™ 700 can also function as a WLAN access point which makes it ideal for establishing a multi-user environment.

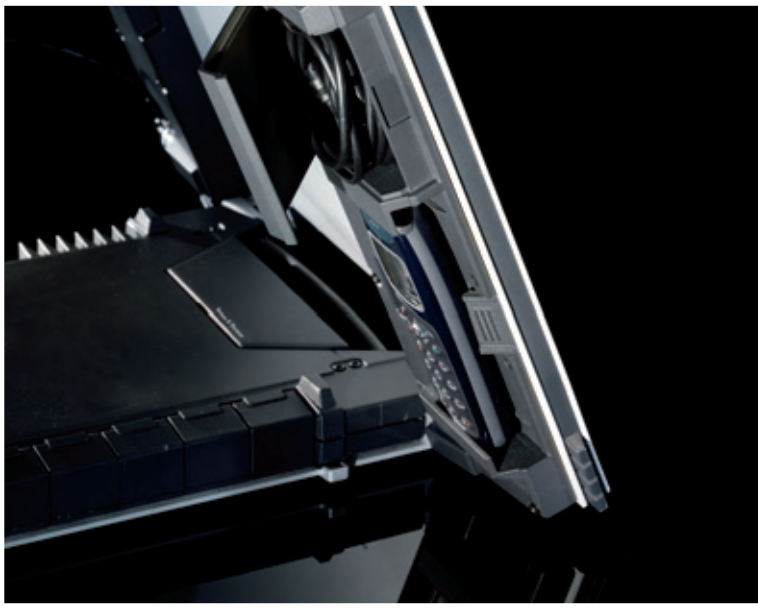
A clear edge

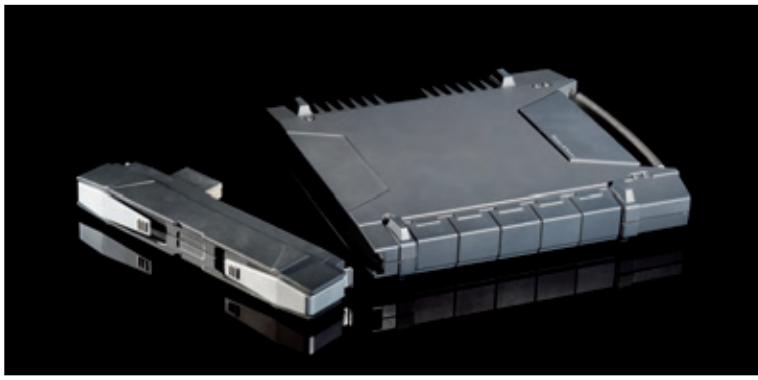
Feature-wise, the EXPLORER™ 700 is edgier than ever, providing more speed, more features and more interfaces than ever before. Design-wise, the edge is also unmistakable. With a cool and ruggedized appearance, the EXPLORER™ 700 is the number one choice in durability and versatility being able to withstand severe geographical conditions such as humidity, dust, extreme weather and changing temperatures. EXPLORER™ 700 is very compact making it easy to carry along, and the detachable antenna enables you to place the antenna outside while sitting comfortably communicating inside. Just put it to the test. It is highly customizable and easy to use with a built-in compass and plug and play function. The possibilities are endless, and the EXPLORER™ 700 is the ultimate choice within the BGAN family.

A GROWING FAMILY

Thrane & Thrane continually develops BGAN solutions to suit every need. Compare below.

	EXPLORER™ 300	EXPLORER™ 500	EXPLORER™ 700
Bandwidth (Rx/Tx)	384/240kbps	464/448kbps	492/492kbps
Streaming IP (guaranteed bandwidth)	32 & 64kbps	32, 64 & 128kbps	32, 64, 128 & 256kbps
ISDN	No	No	Yes – 2 ports
Ethernet	Yes – 1 port	Yes – 1 port	Yes – 2 ports
2-wire	Yes – 1 port	Yes – 1 port	Yes – 2 ports
Solar panel input	No	No	Yes
Bluetooth	Yes – Class 1 (limited range: 25m) Supports dial-up, cordless phone & serial port	Yes – Class 1 Supports dial-up, cordless phone & serial port	Yes – Class 1 Supports dial-up, cordless phone & serial port
WLAN	No	No	Yes – 802.11B/G up to 54Mbps
External antenna	No	Yes – up to 10m	Yes – up to 70m
Battery	Li-On – 36h standby and 1.2h Tx @ 96kbps	Li-On – 36h standby and 2.25h Tx @ 128kbps	Li-On – 36h standby and 2.5h Tx @ 144kbps
Weight	1.4kg / 3.1lbs	1.4kg / 3.1lbs	3.2kg / 7.0lbs
Size (H x W x D)	17.0 x 21.7 x 5.2cm / 6.69 x 8.5 x 2.1inches	21.8 x 21.7 x 5.2cm / 8.6 x 8.5 x 2.1inches	29.7 x 39.9 x 5.1cm / 12.1 x 16.0 x 2.0inches
IP grade	IP 54	IP 54 External antenna IP 66	Transceiver IP 52 Antenna IP 66





Know your net-words

BGAN – Broadband Global Area Network. Inmarsat's term for the new global broadband network with transfer rates up to 492 kbps.

R-BGAN - Not to be confused with BGAN. Inmarsat's Regional Broadband Global Area Network. A slower connection than BGAN not offering voice or IP streaming. Thrane & Thrane does not currently market any R-BGAN terminals.

GAN – Global Area Network. The term is constructed on the model of the Local Area Network (LAN), which has become the standard for offices all over the globe. The Inmarsat GAN offers wireless ISDN all over the globe. The Messenger is Thrane & Thrane's GAN terminal.

Standard data – With standard data, you get a variable transfer rate, depending on the terminal, geographic location and conditions. BGAN allows data transfer rates at up to 492 kbps.

Streaming IP – Streaming is a technique for transferring data to be processed as a continuous stream – e.g. live video or audio, typically demanding high bandwidth, and this is where EXPLORER™ 700 comes into play with as much as 492 kbps.

Standard voice – BGAN also offers world-wide telephony. By dialling 00, country code and phone number, you can speak in a clear voice to anyone around the globe. Standard voice requires very little bandwidth, only 4 kbps. Voice mail is included.

Premium voice – Premium voice is uncompressed audio in pristine quality, using more bandwidth than standard voice. More advanced voice services are also possible, e.g. call waiting, call holding, call barring and call forwarding.

Bluetooth – Bluetooth makes a lot of cables redundant. It is a short distance wireless connection allowing head- and handsets, as well as PCs to connect wirelessly.

VPN – A Virtual Private Network is a software solution that allows users to securely access a corporate network via the Internet.

WORLD LEADERS

Thrane & Thrane is world leader in terminals and land earth stations based on the Inmarsat satellite services. Around 300,000 Inmarsat terminals have been sold world-wide. Approximately 100,000 of these have been delivered by Thrane & Thrane.

Innovation without Limits

Our focus on new technology development and constant innovation has assured us a position as preferred development partner for Inmarsat. Creating the broadband infrastructure of the future, Thrane & Thrane has been commissioned to develop the Radio Access Network for Inmarsat's BGAN high-speed satellite system. Just one proof of how we continue to bring new innovative solutions to the market.

"Competent and creative engineers that think extreme and act rationally."

– Lars Thrane, Founder & President

UnatSolar
Stavnsholt Gydevej 97, DK-3460 Birkerod
phone: +45 7020 8628
www.unatsolar.eu

bgan via inmarsat

71-123294A 00 03.06 OgilvyOne

Thrane & Thrane A/S • Lundtoftegårdsvej 93 D • DK-2800 Kgs. Lyngby • Denmark
Phone: +45 39 55 88 00 • Fax: +45 39 55 88 88 • info@thrane.com • www.thrane.com

Thrane & Thrane

Thrane & Thrane

ACCREDITED SOLUTION

EXPLORER® 700 – UnatSolar P3-62W Foldable Solar Panel

Thrane & Thrane A/S · Lundtoftegaardsvej 93 D · DK-2800 Kgs. Lyngby · Denmark
T +45 39 55 88 00 · F +45 39 55 88 88 · info@thrane.com · www.thrane.com

inmarsat

Document Name:	EXPLORER 700 – UnatSolar P3-62W Foldable Solar Panel	Revision: A

Introduction:

This document describes the P3-62W foldable solar panel from UnatSolar in connection with the EXPLORER 700 terminal.

Typical Users

- Aid
- Government and defence
- Disaster Relief
- Expeditions

Product Description:

The UnatSolar P3-62W 12 Volt portable power pack solar module offers a unique solution for reliable and portable solar power for charging battery packs, PC's, lighting, low-amp 12-volt appliances, etc. The P3-62W weighs around 3 pounds and is very compact when folded for easy storage and transportation. The P3 product line is designed for low maintenance and rugged durability. The SAE plug provides simple attachment to a load. Built-in grommets allow for hanging, mounting or laying in any position.

- Compact, can easily fit in a backpack, carrying bag or in the front pocket of the EXPLORER 700 soft bag
- Durable design for transporting
- Weather resistant, performs well in hot and cold conditions
- Available in black, woodland or desert camouflage

P3-62W unfolded in Black and Woodland

P3-62W solar panel specifications:

Typical Power at STC	:	62 Watt
Nominal Operating Voltage	:	20 Volts
Nominal Rated Current	:	3.1 Amps
Weight	:	3.1 lb (1.4 kg)
Dimensions, unfolded	:	52.5" x 30" x 0.1" (1333 x 762 x 2.5 mm)
Dimensions, folded	:	14.5" x 8.5" x 1.4" (368 x 216 x 36 mm)
Max power to weight ratio	:	20 Watt/lb (44 Watt/kg)

More product info: http://www.unatsolar.eu/images/UnatSolar-P3-62%20watt%20spec%20sheet.pdf

UnatSolar contact details:

E-mail	mailto:info@unatsolar.eu
Phone	+45 7020 8628
Web site	http://www.unatsolar.eu

Thrane & Thrane contact details:

E-mail	mailto:solutions@thrane.com
Web site	http://www.thrane.com
Thrane & Thrane Distributors	http://www.thrane.com/Contact/Distributors.aspx

Tested on products:	EXPLORER 700	2.04

Instructions:

How to connect the P3-62W solar panel to EXPLORER 700 terminal:

1. Unfold the P3-62W solar panel and point it towards the sun for optimal charging
2. Plug one end of the 8 foot extension chord to the EXPLORER terminal DC input
3. Connect the SAE plug to the P3-62W solar panel
4. The EXPLORER terminal will automatically be powered on and start charging once it is connected to the solar panel.

Folding instructions for the P3-62W solar panel:

Step 1: Fold one side of the panel down the hinge-fold, active solar cells to the inside.

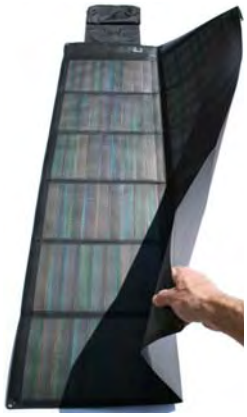


Figure 1.

Step 2: Starting at the end away from the cable, fold the panel along its hinge-folds.

Figure 3.

Step 3: Then wrap the flap around until both the hook and loop sides of the Velcro are lined up.

Figure 4.

Step 4: Lastly, press the Velcro together to secure the fold unit.

Figure 5.

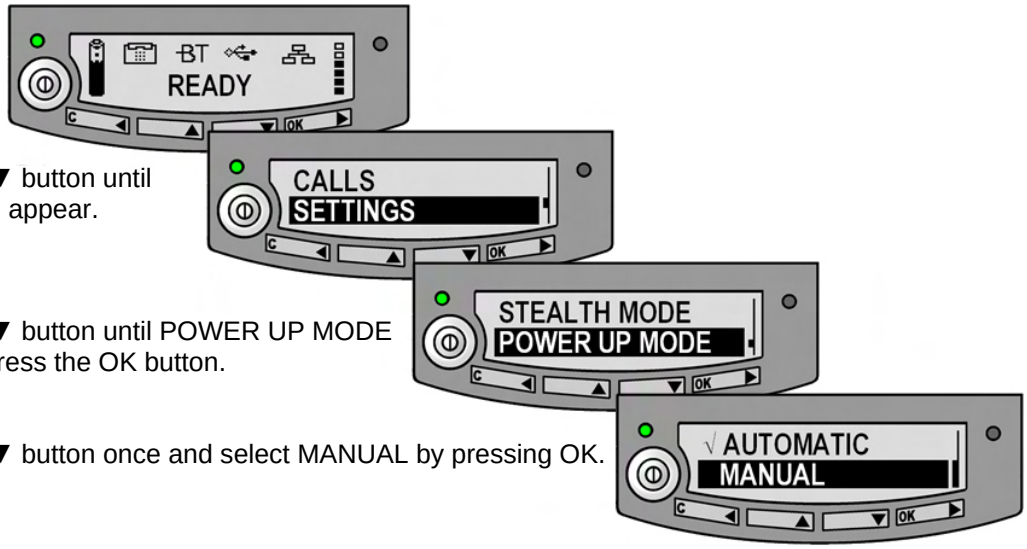
It is recommended to set the Power Up Mode in the EXPLORER 700 to Manual, so it does not power up automatically each time the solar panel is connected. Please refer to next page.

Step 1:
Press the ▼ button.

Step 2:
Press the ▼ button until SETTINGS appear.
Press OK.

Step 3:
Press the ▼ button until POWER UP MODE appears. Press the OK button.

Step 4:
Press the ▼ button once and select MANUAL by pressing OK.



Maintenance:

- Make sure that there is no dirt or moisture inside the connector.
- When disconnecting a device from the panel, do not pull on the cable; always hold onto the connector.
- Keep the front of the panel clean. Do not expose to sharp objects. The panel can be cleaned with a wet cloth and a mild soap solution when necessary.

You can preserve power by following below guidelines:

- Point the EXPLORER antenna carefully to obtain best possible signal strength.
- Upgrade the EXPLORER 700 software version to 2.04 or latest software release (Advanced Power Management).
- Switch OFF the EXPLORER 700 when not used for more than 30 min.
- Turn OFF the interfaces you have no plans of using (please refer to EXPLORER 700 User Manual, Chapter 4).
- Set Backlight to Timed (is set to 10 seconds by default).

Need more power?

- Spare EXPLORER 700 battery (part no. TT-3686P).

Notes:

Although the P3-62W may be used to power other electronic devices the P3-62W has been optimized to power the EXPLORER 700 terminal. Other electronic devices may be charged at the consumer's own risk.

UnatSolar is a registered supplier to armies worldwide. For more information please refer to: http://www.armedforces-int.com/companies/unatsolar.asp

Tested:

Test performed:

#1 Charging in direct sunlight while being on-line with the EXPLORER 700 terminal and the EXPLORER Bluetooth Handset ready to receive an incoming call. Total charge time 2 hours and 40 min.

Information in this document is subject to change without notice and does not represent a commitment on the part of Thrane & Thrane A/S.
© 2008 Thrane & Thrane A/S. All rights reserved. Printed in Denmark.